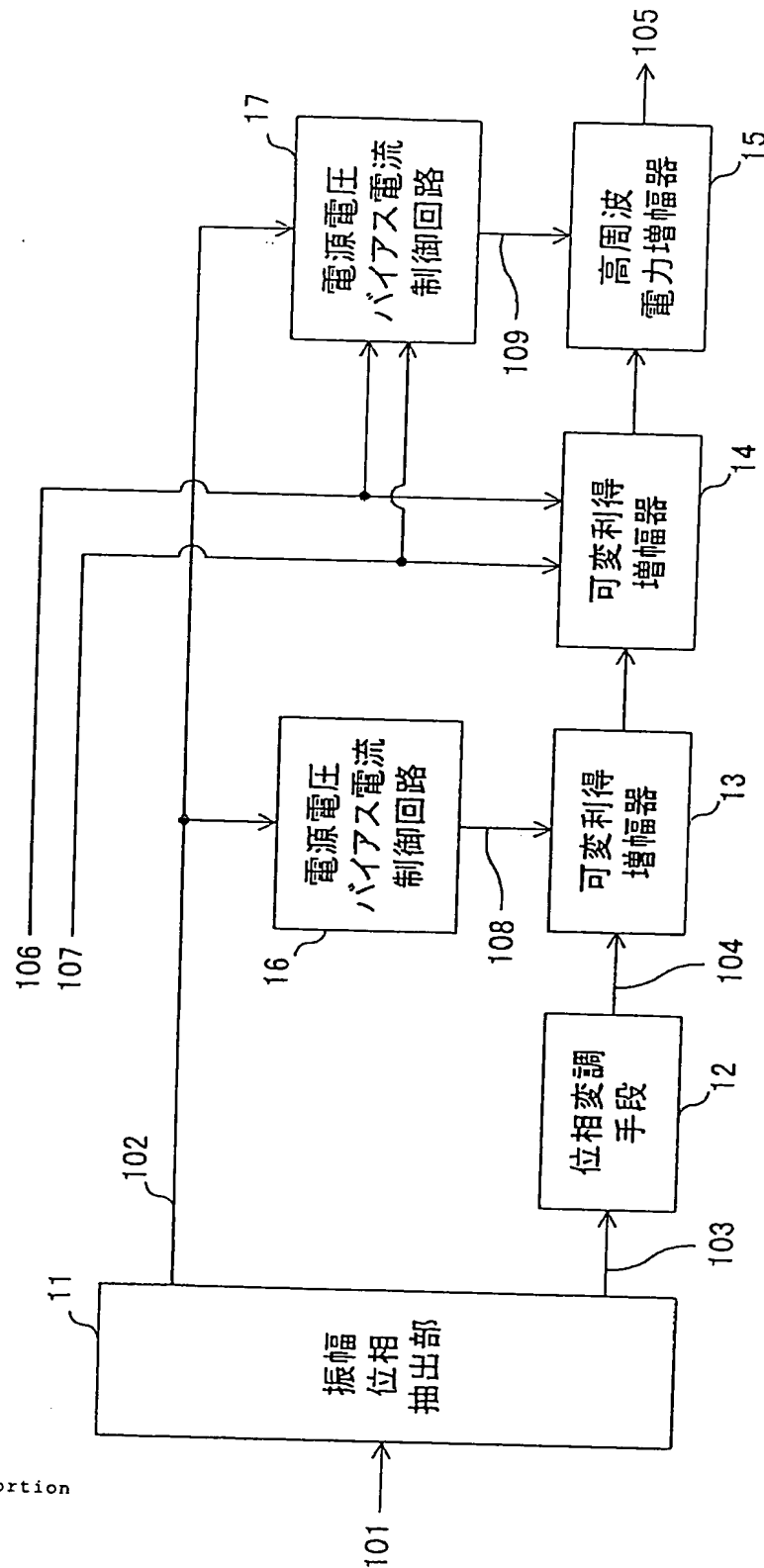
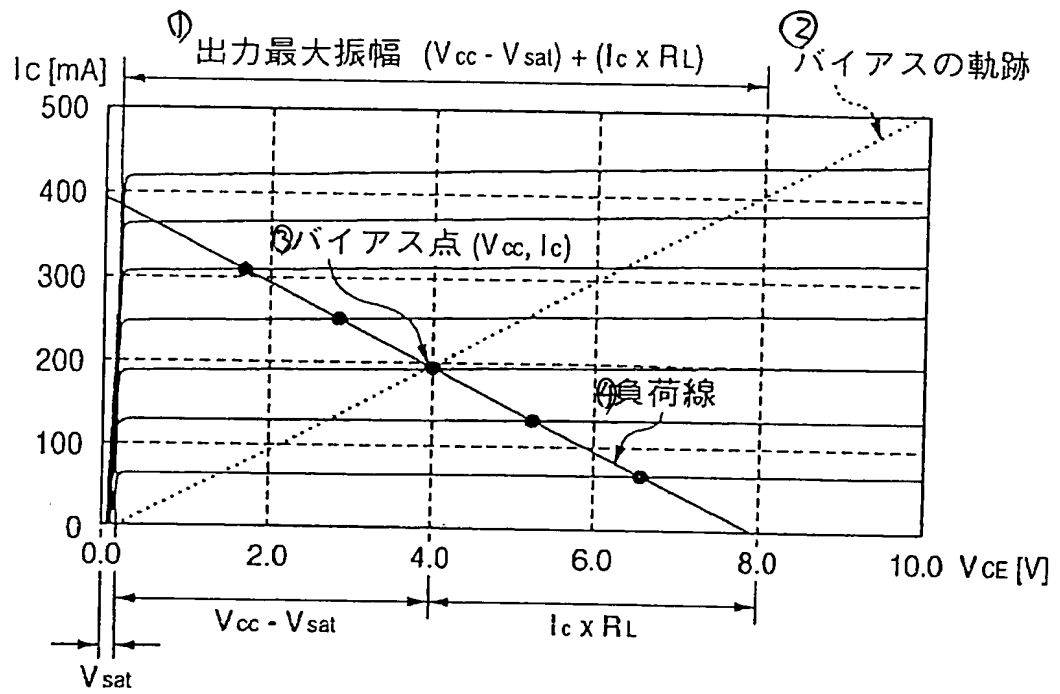


Fig. 1



- 11: amplitude/phase extraction portion
- 12: phase modulation means
- 13: variable gain amplifier
- 14: variable gain amplifier
- 15: high-frequency power amplifier
- 16: supply voltage/bias current control circuit
- 17: supply voltage/bias current control circuit

Fig.2



- ① maximum output amplitude
- ② locus of bias
- ③ bias point
- ④ load line

Fig. 3

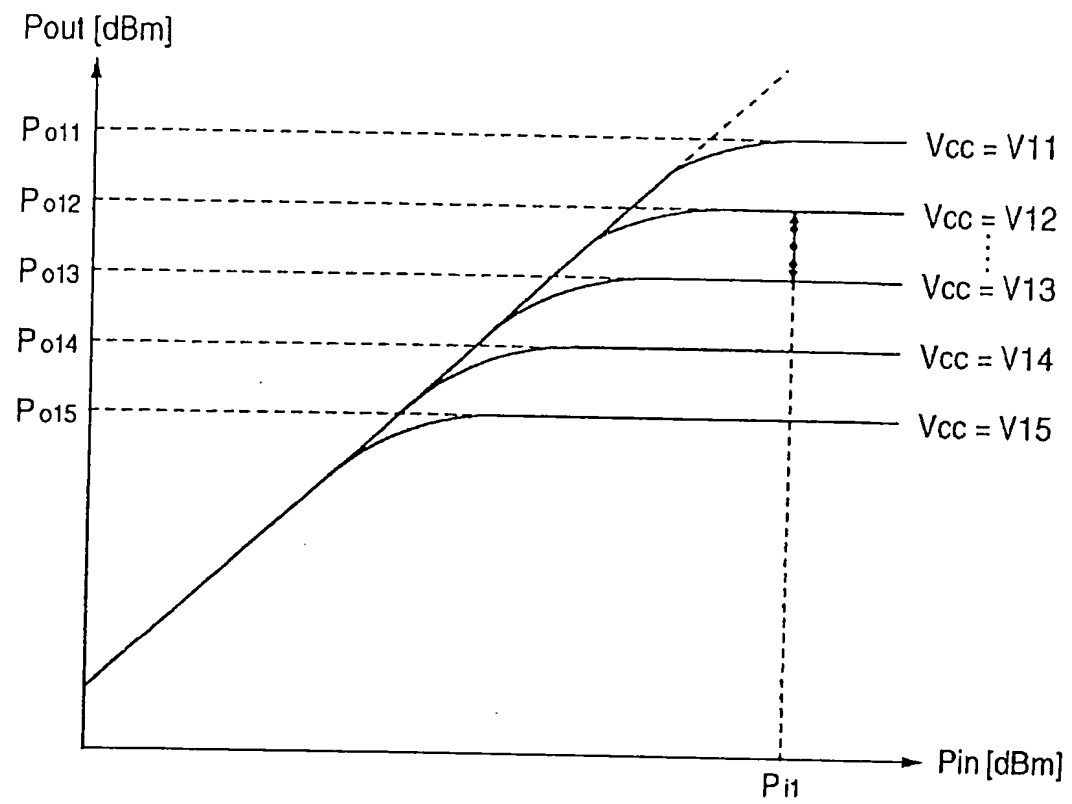


Fig. 4

① time

② linear operating mode

③ gain of variable gain amplifier 14

④ voltage of supply voltage/bias current control circuit 17

⑤ current of supply voltage/bias current control circuit 17

⑥ saturation operating mode

⑦ gain of variable gain amplifier 14

| ① 時間   | ② 線形動作モード            |                                 | ⑥ 飽和動作モード                       |                      |
|--------|----------------------|---------------------------------|---------------------------------|----------------------|
|        | 可変利得<br>増幅器14<br>の利得 | 電源電圧<br>バイアス電流<br>制御回路<br>17の電圧 | 電源電圧<br>バイアス電流<br>制御回路<br>17の電流 | 可変利得<br>増幅器14<br>の利得 |
| t(1,1) | $g_1$                | $V_1$                           | $I_1$                           | $g_1 + \alpha$       |
| t(1,2) | $g_1$                | $V_1$                           | $I_1$                           | $g_1 + \alpha$       |
| t(1,3) | $g_1$                | $V_1$                           | $I_1$                           | $g_1 + \alpha$       |
| t(1,4) | $g_1$                | $V_1$                           | $I_1$                           | $g_1 + \alpha$       |
| t(1,5) | $g_1$                | $V_1$                           | $I_1$                           | $g_1 + \alpha$       |
| t(1,6) | $g_1$                | $V_1$                           | $I_1$                           | $g_1 + \alpha$       |
| .....  | .....                | .....                           | .....                           | .....                |
| t(n,1) | $g_n$                | $V_n$                           | $I_n$                           | $g_n + \alpha$       |
| t(n,2) | $g_n$                | $V_n$                           | $I_n$                           | $g_n + \alpha$       |
| t(n,3) | $g_n$                | $V_n$                           | $I_n$                           | $g_n + \alpha$       |
| t(n,4) | $g_n$                | $V_n$                           | $I_n$                           | $g_n + \alpha$       |
| t(n,5) | $g_n$                | $V_n$                           | $I_n$                           | $g_n + \alpha$       |
| t(n,6) | $g_n$                | $V_n$                           | $I_n$                           | $g_n + \alpha$       |
| .....  | .....                | .....                           | .....                           | .....                |

④ voltage of supply voltage/bias current control circuit 17

⑤ current of supply voltage/bias current control circuit 17

Fig. 5

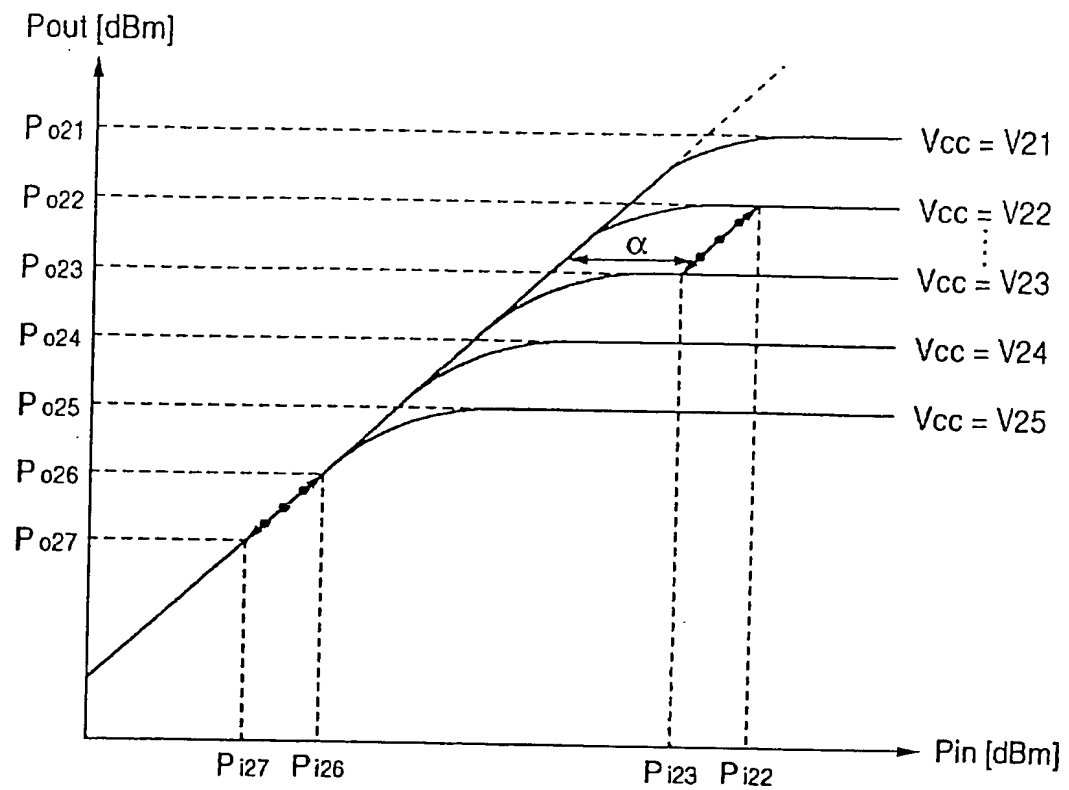


Fig. 6

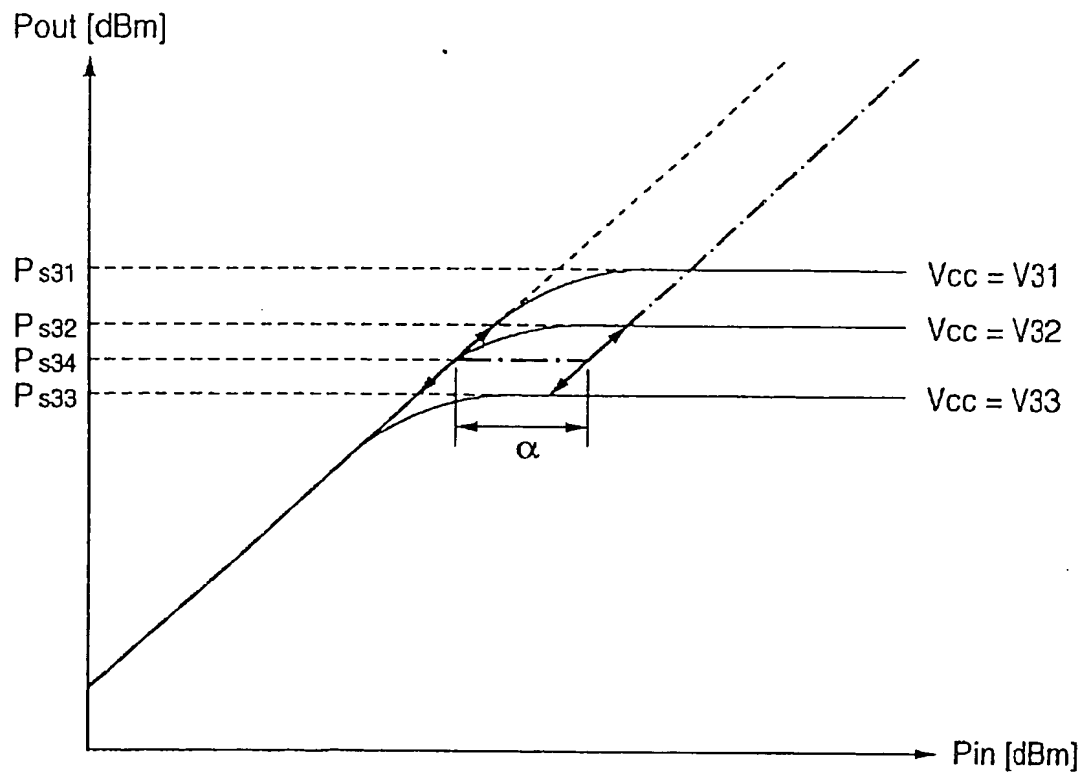


Fig. 7

- 11: amplitude/phase extraction portion  
 12: phase modulation means  
 21: mixer  
 14: variable gain amplifier  
 15: high-frequency power amplifier  
 17: supply voltage/bias current control circuit

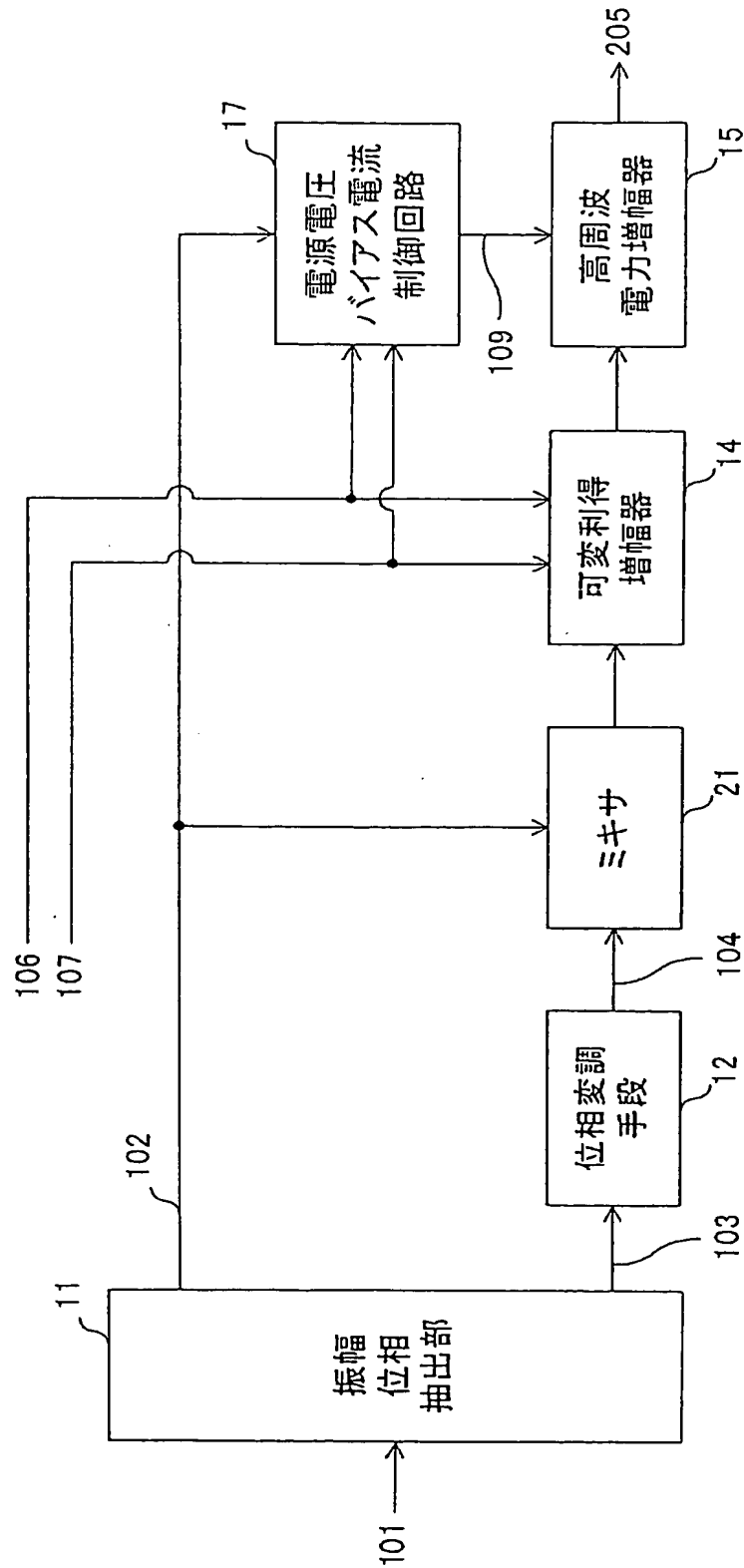


Fig. 8

- 31: amplitude extraction portion
- 32: quadrature modulator
- 14: variable gain amplifier
- 15: high-frequency power amplifier
- 17: supply voltage/bias current control circuit

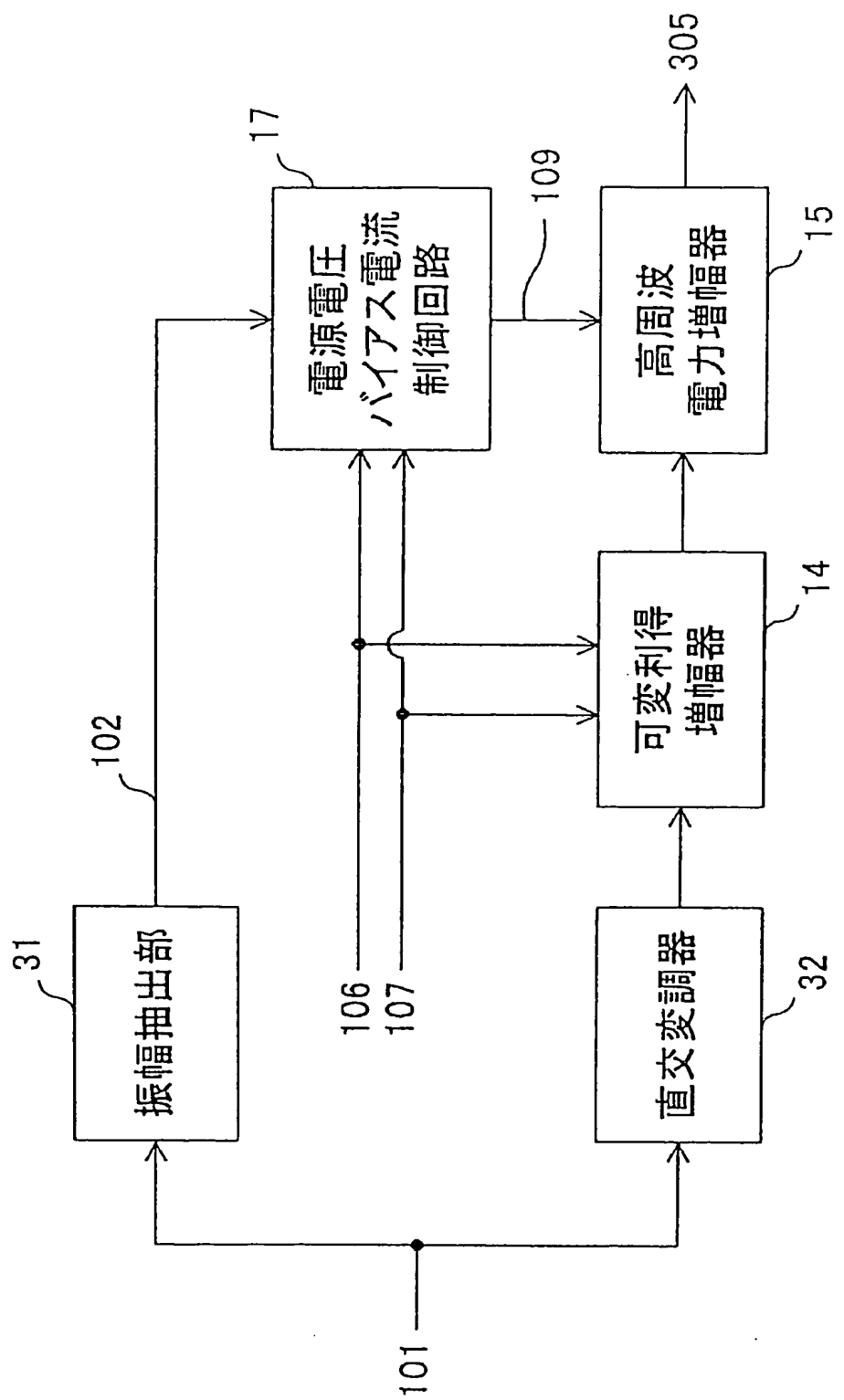


Fig. 9

